

**AIR ISSUES & REGULATIONS COMMITTEE**  
A Committee of the Bay Area Clean Water Agencies

**Quarterly Meeting**  
**September 1, 2021**

# Agenda

- State Legislation that May Impact Air Issues & Regulations
- Proposed Amendments to BAAQMD Regulation 2 (Permitting)
- Criteria Air Pollutant & Air Toxics Reporting:  
AB 617 & AB 2588 Program Updates
- BAAQMD Rule 11-18: Reduction of Risk from Air Toxics
- SB 1383: SLCP Reduction Regulations and Implementation Status
- BAAQMD Proposed Regulation 13: Climate Pollutants CH<sub>4</sub> and N<sub>2</sub>O
- CARB Advanced Clean Vehicle Rules
- Open Discussion/Member Updates
  - Ferric Chloride Shortage
- Adjourn



## Status of Recently Introduced State Legislation

- ~~AB 426: Toxic air contaminants~~
- ~~AB 1001: Air pollution and mitigation measures for air and water quality impacts~~
- ~~AB 1005: Scientific review panel, toxic air contaminants~~
- SB 619: SLCP implementation, organic waste



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## Proposed Amendments to BAAQMD Reg 2: Rules 2-1 and 2-5

- Public Workshop on Concepts May 12<sup>th</sup>
- Submitted comments on concepts May 28<sup>th</sup>
- Public Workshop on Draft Amendments Aug 24<sup>th</sup>
- Comments due today – Sept 1<sup>st</sup>!
- Updated draft amendments to be released Sept 27<sup>th</sup>



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## Proposed Amendments to BAAQMD Reg 2: Rules 2-1 and 2-5

- Driven by external pressures:
  - BAAQMD urged to revise permitting rules so new sources are no longer allowed in communities overburdened by poor air quality.
  - Emphasized community members are dying of cancer, and emissions from stationary sources are responsible for higher rates of cancer in overburdened communities.
- BAAQMD proposing to make rules more health protective
  - Make air toxics permitting rule more stringent, District-wide or in overburdened communities (i.e., target facilities triggering NSR)
  - Enhance public noticing and analysis requirements
  - Evaluate methods to make permitting more stringent for sources that emit diesel particulate matter



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## BACWA Comments on Proposed Amendments to BAAQMD Reg 2: Rules 2-1 and 2-5

- Support BAAQMD protecting public health by reducing risk
- Efforts already underway reduce risk (Rule 11-18, AB 617/AB 2588 regulations, OEHHA, etc.)
- Stationary sources represent only 6% of risk! Efforts should focus on remaining 94%, majority associated w/ vehicle emissions. CARB is developing regulations to electrify vehicles to reduce those emissions and resulting risk. We support BAAQMD efforts to accelerate transition to cleaner mobile sources.
- Updates may prohibit essential public services from expanding, using needed equipment to operate during emergencies, and incentivize keeping older engines.
- Support excluding limits on equipment supporting essential public services during emergencies...BUT
- POTWs are not included in the list of “essential services”



*Comments due September 1<sup>st</sup>!*

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## CARB enacted Criteria Air Pollutant & Toxic Air Contaminant Reporting (CTR)

- AB 617 gives CARB authority to “harmonize” air monitoring, reporting, & emission reductions from stationary sources
- AB 2588 compound list updated to >1000 compounds
  - Many of the compounds have unknown toxicity levels
  - Many of the compounds have unknown emission factors
  - Many of the compounds are not relevant to WWTPs
- CASA negotiated phased compliance, allowing WWTPs to:
  - Report business as usual through 2028 (begin reporting in 2029)
  - Perform a “two-step process” for determining shortlist of compounds
    - Scanning air space of unit processes to determine detectable compounds
    - Determining the sampling and analysis methods to quantify emissions (Mimic 1990 Pooled Emissions Estimation Program, PEEP)

*Final Statement of Reasons officially confirmed our interpretation of the regulation!*

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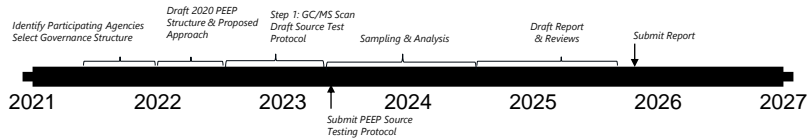
## CARB enacted Criteria Air Pollutant & Toxic Air Contaminant Reporting (CTR)

- Final Statement of Reasons (FSOR) released August 12<sup>th</sup>
  - Business-as-usual annual emissions reporting to continue through 2028 for waste sector, even if other sources, such as backup diesel generators are on site (...or until new/updated emission factors are established through source testing or other studies). (see B-9.10)
  - Emissions quantification methods and associated data collected under the EICG *two-step process* will be used to meet CTR reporting requirements for the waste sector. (see B-9.10)
  - Additionally, reporting for portable equipment is required for facilities subject to GHG or Criteria facility applicability criteria ([CTR Sections 93401\(a\)\(1-2\)](#)). Portable equipment used onsite by third party contractors must be reported.

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## Next steps for the wastewater sector...

- CASA to draft proposal for performing the Two-Step Process
- Approximate timeline for Two-Step Process: ~5 years



*CASA One-Page Summary to educate your staff and local air district staff!*



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## Rule 11-18: Risk Reduction from Air Toxic Emissions at Existing Facilities

- Purpose: Protect public from TACs from existing facilities
- Phased implementation based on cancer prioritization – WWTPs in Phase 2 (data requests starting 2021)
- ISSUES:
  - Emission factors are outdated (based on old influent data) and may result in erroneously high Prioritization Scores.
  - Grouping of related sites (adjacent landfills, etc)
- If WWTP triggers Rule, it requires:
  - Health Risk Assessments (18-month process)
  - Risk Reduction Plan development (18-month process)
  - Implementation of Risk Reduction Measures (5 years + 5 years to implement)



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## Rule 11-18: Risk Reduction from Air Toxic Emissions at Existing Facilities

### Implementation Procedures (April 2018)

“Provide opportunities for public review and comment on site-specific health risk assessment results and risk reduction plans.”

Initial draft HRAs under Rule 11-18:

- AB&I Foundry
- Irvington Memorial Cemetery Crematorium
- Santa Clara Cogeneration Plant
  
- Draft HRAs showed elevated health risks at the foundry and crematorium primarily due to toxic metals.
- Natural gas cogen facility (7 MW) risk was below trigger limits → not subject to Rule 11-18



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## Rule 11-18: Risk Reduction from Air Toxic Emissions at Existing Facilities

### • Actions to Monitor:

- Final implementation schedule from BAAQMD
- BAAQMD plans to send data requests in quarterly batches – expect Phase II sites with Priority Score >100 to be first (starting third or fourth quarter 2021)
- Plants expected to respond to data request (2-4 months)
  
- AIR Emissions Inventory Subcommittee
  - Need members to run the data collection and emissions inventory spreadsheet template
  
- Still need to address emission factors...



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## SB 1383 (SLCP Reduction & Implementation)

- 40% methane reduction by 2030 (relative to 2013 levels)
- Organic waste diversion from landfills (includes biosolids, digestate, and sludges)
  - 50% by 2020 (relative to 2014 levels)
  - 75% by 2025 (relative to 2014 levels)
- Next Steps
  - Adopted Nov 9, 2020
  - State to enforce Jan 1, 2022
  - Local jurisdictions start Jan 1, 2024
  - Compliance by Jan 1, 2025



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## SB 1383 (SLCP Reduction & Implementation)

- Items to address...
  - Transfer of Emission Reduction Credits (offsets) from landfills to POTWs if combusting biogas onsite and compost facilities
    - Met with CalRecycle yesterday
    - Meeting with CAPCOA end of October
  - Understanding procurement of products – whether they will consider other products (biosolids) and how procurement is applied to city and district facilities
  - Updates to General Order considered, but SWRCB understaffed
  - Designating facilities as landfills that are not determined to be diversion



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## BAAQMD Proposed Regulation 13: Climate Pollutants

Rule development suspended due to COVID-19 & lack of data

Rule	Next Workshop	Board Presentation	Notes
13-1: Significant Methane Releases	TBD	TBD	Tabled indefinitely to focus on source-specific rules.
13-2: Organic Waste Handling	TBD	TBD	Draft focused on organic material handling: Material Recovery Facilities, Transfer Facilities, Chip & Grind Facilities.
13-3: Composting Operations	TBD	TBD	Draft language in development, not released.
13-4: Sewage Treatment & Anaerobic Digestion	TBD	TBD	BACWA requested involvement to provide input on draft language. Draft rule to consider biogas produced/collected, minimizing other pollutants, flare requirements, record keeping, reporting requirements, etc. BAAQMD is working with BACWA to collect baseline information to inform rule development and reviewing an unsolicited proposal.
13-5: Hydrogen Plants	-	TBD	Focus on hydrogen production at petroleum refineries.

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## Draft Summary of Survey results for BMPs Controlling CH<sub>4</sub>

- Identify areas of potential biogas/methane leaks and releases and understand measures in place to mitigate them
  - Leak detection – methods to check/tools and frequency of checks pre-, during, and post-digestion
  - Biogas/methane capture
  - Biogas conditioning
  - Onsite combustion (beneficial use/abatement)
  - Other beneficial uses (processing for CNG or pipeline injection)
- Survey results from 31 of 49 Bay Area POTWs – Excellent!!
  - 63% of Bay Area POTWs
  - 92% of design average dry weather flow (ADWF)

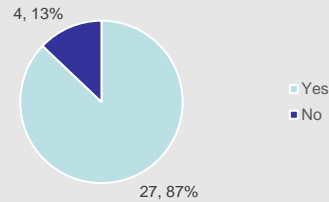


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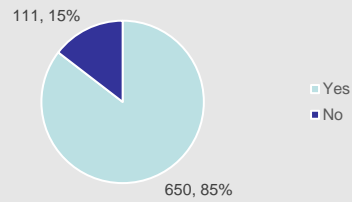


## Part I. General Plant Information – Anaerobic Digestion

Does your facility have anaerobic digestion?  
(Number of POTWs, %)



Does your facility have anaerobic digestion?  
(Design ADWF in mgd, %)

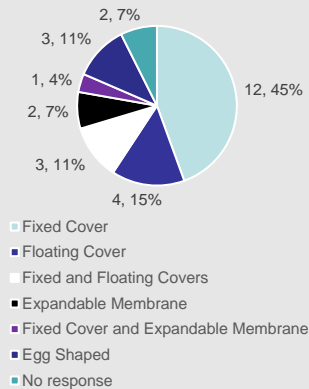


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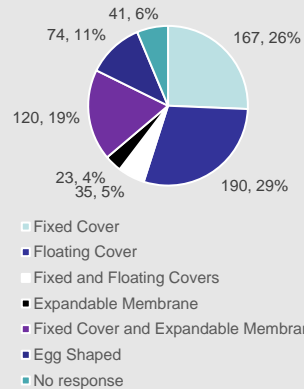
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## Part II. Anaerobic Digestion – Type of Cover

What type of cover(s) are on the anaerobic digester(s)?  
(Number of POTWs, %)



What type of cover(s) are on the anaerobic digester(s)?  
(Design ADWF in mgd, %)

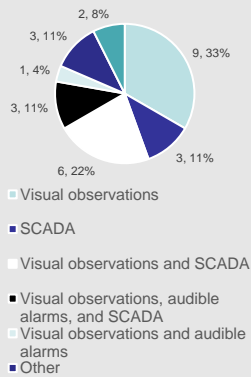


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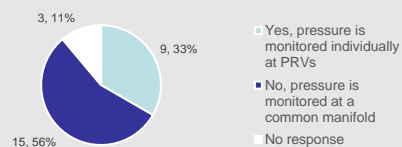
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## Part II. Anaerobic Digestion – PRV Monitoring

How do you monitor the operation of your PRVs?  
(Number of POTWs, %)

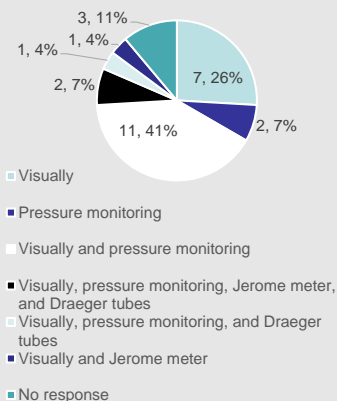


Can you monitor pressure at your PRVs individually?  
(Number of POTWs, %)

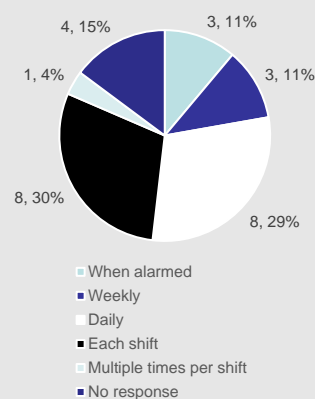


## Part II. Anaerobic Digestion – Biogas Leak and Digester Inspections

How do you inspect or monitor your digesters for damage or biogas leaks?  
(Number of POTWs, %)

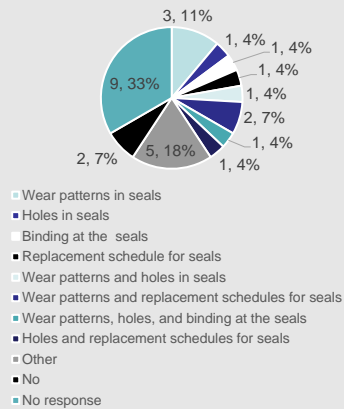


When are digester inspections performed?  
(Number of POTWs, %)

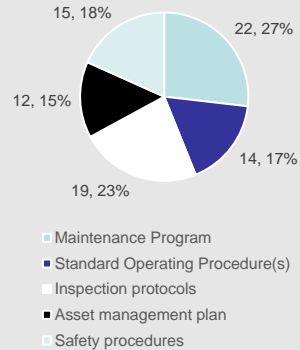


## Part II. Anaerobic Digestion – Biogas Leak and Digester Inspections

Do you collect any other observations to control biogas leaks? (Number of POTWs, %)



Which of the following programs/procedures do you have to address biogas management to prevent leaking/venting? (Number of POTWs, %)

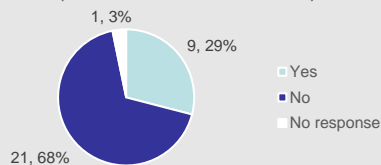


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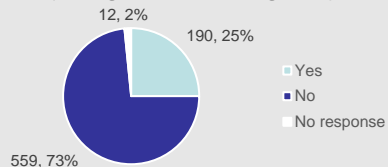
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## Part VI. Sludge Storage in Ponds and Lagoons

Does your facility use lagoons or ponds for storing and/or treating sludge? (Number of POTWs, %)



Does your facility use lagoons or ponds for storing and/or treating sludge? (Design ADWF in mgd, %)



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## Part VI. Sludge Storage in Ponds and Lagoons

Facility	A	B	C	D	E
Type	Facultative lagoon with surface aeration	Passive lagoon with dewatering by settling	Sludge drying bed and anaerobic solids emergency storage	Facultative lagoon with settling without aeration	Facultative pond with surface aeration
Anaerobic digestion upstream?	Yes	Yes	Yes	Yes	Yes
Number of lagoons	6	6	4	13	3
Water depth	15 ft	6 ft	2-3 ft	5 ft	10 ft
Total surface area	20.8 acres	185,000 sf	9,000 sf	28.4 acres	126,650 sf
Total volume	140 acre-ft	8 MG	0.154 MG	46,271,000 (units not specified)	6.32 MG

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## CARB Advanced Clean Vehicle Rules: Clean Fleet Rule

### Clean Fleet Rule Details

- Zero-emission fleets by 2045 (Governor pushing for 2035)
- Government entities viewed as early adopters

### Actions

- Workshops held 3/2 and 3/4
- Comments submitted 4/2
- Met with CARB 4/16
- Draft regulation released 8/25!
- Workshop Sept 9<sup>th</sup> for public comment
- CARB plans to release a second draft for review
- Intention to adopt regulation by summer 2022



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## CARB Advanced Clean Vehicle Rules: Clean Fleet Rule

- Draft regulatory language released Aug 25<sup>th</sup>
  - Draft Cost Discussion Document
  - High Priority and Federal Fleet Requirements
  - **Public Fleet Requirements**
  - 100% ZEV Sales Requirements
  - Drayage Truck Requirements



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## CARB Advanced Clean Vehicle Rules: Clean Fleet Rule

- “Near-zero-emissions vehicle” or “NZEV” means a vehicle as defined in title 13, CCR section 1963(c)(16)...capable of operating like a ZEV for a minimum number of miles.
- General requirements...for a public agency:
  - (1)(A)...**not** solely in a designated low population county:
    1. Jan 1, 2024, 50% of new motor vehicle purchases must be ZEVs; and
    2. Jan 1, 2027, 100% of new motor vehicle purchases must be ZEVs.
  - (1)(B)...**solely** in a designated low population county:
    1. Jan 1, 2027, 100% of new motor vehicle purchases must be ZEVs.
  - (1)(C) Until Jan 1, 2035, NZEV purchases will be counted the same as a ZEV purchase if a public bid is issued to purchase ZEVs and NZEVs, but no responsive bids for ZEVs were received for that bid.

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## CARB Advanced Clean Vehicle Rules: Clean Fleet Rule

- Section 95693.2 Public Fleet Exemptions
  - (a) **Exemption for Emergency Response.** Public agencies can apply for an exemption from ZEV or NZEV purchase requirements if vehicles will...provide emergency response in supporting electricity, natural gas, **water, or wastewater services** across California... if the following conditions are met:
    - (1) >75% of that body type in the fleet are already ZEVs
    - (2) ...necessary publicly accessible charging or hydrogen fueling infrastructure or mobile fueling options are not readily available in areas to be served in emergency response
    - (3) The agency has obtained a letter from the governing body that lists the number of vehicles to be purchased for emergency response with details about vehicle type, and what areas are typically served, and a statement that explains why available ZEVs are not suitable to be dispatched to serve those areas in emergency response; and
    - (4) The agency must keep records of the letter signed by the governing body and make it available to CARB staff upon request.
      - The EO will grant the extension if the conditions of this section have been met, provided not >25% of the total vehicles in the fleet would be using extensions...

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## CARB Advanced Clean Vehicle Rules: Clean Fleet Rule

- Next steps
  - Prepare comment letter and deliver comments at Sept 9<sup>th</sup> workshop
  - Support CASA meeting with CARB Board Members, Rajinder Sahota (CARB's Deputy Director of Climate Change and Research), and CalEPA



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## Open Discussion / Member Updates

- Ferric chloride shortage



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## Thank you!

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